

What is claimed is:

1. A device for molding spheroidal food products comprising:

a plurality of cutting tool elements;

a central opening formed from frontal sections of blades defined on

5 front-ends of the plurality of cutting tool elements;

a cylindrical food product continuously passing downwardly through
the central opening;

the blade of any of the cutting tool elements actively contributes effort
to advancing or retreating displacement of the central opening toward

10 direction of a central line, thereby enabling the plurality of blades to
realize opening or closing of the central opening;

an inner side sliding surface and an outer side sliding surface
configured on each of the cutting tool elements;

wherein a transverse slide groove and a convex rail are respectively
15 configured on the inner side sliding surface, and another transverse

slide groove and another convex rail are respectively configured on

the outer side sliding surface, and the convex rails of each of the
adjacent cutting tool elements respectively slide along the slide

grooves; an edge formed from angle of intersection of the inner side

20 sliding surface and the outer side sliding surface defines the blade;

during course of closing displacement of the central opening by the plurality of blades, the plurality of convex rails exert pressure and hold firm a circumferential surface of the cylindrical food product, thereby enabling the surface of the cylindrical food product to gradually form a plurality of deep depressions and protrusions along a central region of the cylindrical food product; thus upon closing of the central opening, the cylindrical food product is thereupon severed by the converged plurality of blades, and molded into a spheroidal food product therefrom.

2. A device for molding spheroidal food products according to claim 1,
- the plurality of cutting tool elements;
- the central opening formed from the frontal sections of the blades defined on the front-ends of the plurality of cutting tool elements;
- wherein each of the cutting tool elements is configured with:
- the inner side sliding surface, whereon the plurality of transverse grooves is defined, and the convex rail is formed between each pair of the adjacent grooves;
- the outer side sliding surface, whereon is configured a plurality of transverse convex rails;
- the groove is defined from an indentation formed between each pair

of the adjacent convex rails;

the blade, whereby the edge formed from the angle of intersection of the inner side sliding surface and the outer side sliding surface defines the blade;

5 a plurality of arc-shaped rails which operate in coordination with and slide within the slide grooves of the adjacent cutting tool elements, and the slide grooves which operate in coordination with and slide on the convex rails of the adjacent cutting tool elements.

3. A device for molding spheroidal food products according to claim 1,

10 wherein an upper vertical convex surface is configured on an upper edge of a surface of the inner side sliding surface;

wherein an upper vertical concave surface is configured on the outer side sliding surface, whereby the vertical concave surface can slide on the convex surface;

15 a rear side wall surface of the cutting tool element forms an A sliding surface, and a B sliding surface and a B top wall surface are respectively configured on an inner circumferential edge wall of a recess interior to a disc, the A sliding surface slides on the B sliding surface, the inner side sliding surface slides and berths on the B top
20 wall surface, a central perforation is defined in the recess, which

provides for a mutual passage with the central opening.

4. A device for molding spheroidal food products according to claim 1,
wherein the plurality of cutting tool elements are pin connected to an
annular plate, a circular perforation is defined in the annular plate,
5 and a plurality of guide pins are respectively firmly secured on an
underneath face of the annular plate, each of the guide pins freely
connect and respectively slide within a groove defined atop each of
the cutting tool elements; a system of teeth are configured on an
outer edge of the annular plate, whereby the system of teeth mesh
10 with another system of teeth of a row of teeth, and the row of teeth
are so configured to run back and forth, thereby driving the plate to
correspondingly rotate to-and-fro in a clockwise and anticlockwise
direction, the guide pins drive the plurality of cutting tool elements to
mutually slide displace, and as a consequence open and close the
15 central opening thereof.
5. A device for molding spheroidal food products according to claim 1,
wherein vertical grooves are defined in the inner side sliding surfaces,
and provide for semisolid edible oil to be infixed for additory usage
therewith.
- 20 6. A device for molding spheroidal food products according to claim 1,

wherein a continuity assembly of at least one convex blade and at least one vertical blade is configured on the blade of each of the cutting tool elements, the convex blades of each pair of the corresponding cutting tool elements can mutually contact and converge, and the vertical blades of each pair of the corresponding cutting tool elements can also mutually contact and converge, thereby enabling closing of the central opening.

7. A device for molding spheroidal food products according to claim 1, wherein a top connecting device is configured below a central perforation, and comprises:

a top plate positioned below the central perforation, a lower end of the top plate is connected to a slide plate, and a lower end of the slide plate is provided with a connecting terminal;

a rocker set driven by a cam, comprising:

an upper connecting rod, one end of which is loose connected to a fixed shaft, with the fixed shaft serving as axle center of gyration, and another end is loose connected to one end of a vertical connecting rod, and wherein a small pulley is configured at an appropriate position on a side rod of the upper connecting rod;

a spring is attached to a stationary member, thereby forming a fixed

terminal; another end is connected to the upper connecting rod, thus providing the upper connecting rod with a springiness effect;

a lower connecting rod, one end of which is loose connected to a lower end of the vertical connecting rod, and another end is loose
5 connected to the connecting terminal of the slide panel;

the small pulley, driven by intermittent contact of protruding ends of the cam, thereby impels the slide plate to translate position in an upward or downward direction;

a conveyor belt positioned atop the top plate, whereby upward
10 translation of the top plate displaces upward and supports the conveyor belt at a higher position, and downward translation of the top plate to a bottom dead center thereat releases the conveyor belt.